

SOME NEW ARANEIDÆ FROM THE COUNTY OF CUMBERLAND.

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FIGS. 1, 2, 3, 4.

THE present paper contains descriptions of three species new to science from within the county of Cumberland, New South Wales. These represent three distinct families, viz., Uloboridae, Theridiidae and Argiopidae, and were collected respectively by my colleague, Mr. A. R. McCulloch, and Master Chas. Danvers Power, of Burwood.



Fig 1

Uloborus congregabilis, RAINBOW.
Male.

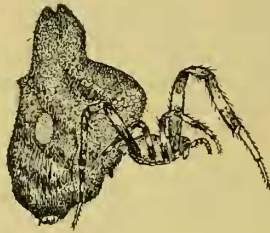


Fig. 2

Uloborus congregabilis, RAINBOW.
Female.



Fig. 3

Phylarchus splendens, RAINBOW. Female.

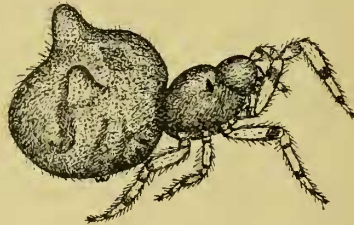


Fig. 4

Carepalxis poweri, RAINBOW. Female.

Family ULOBORIDÆ.

This family is a very small one, but it embraces a number of remarkable and interesting species, which for convenience have been divided into four sub-families, three of which occur in Australia. The form described below belongs to the genus *Uloborus*, Latr., and is included in the sub-family Uloborinæ. In his great classic, "Histoire Naturelle des Araignées," Simon defines the range of this genus as follows:—"Europa et Regio mediterranea; Africa; ins. Atlantica; Madagascar; Asia centr. merid. et orient. $\frac{1}{2}$ Malaisia; Papuaia et Oceania; America sept., centr., merid. et antilliana."¹ This is a very wide range, when we consider that only about sixty species are as yet known to science. The genus *Uloborus* has been divided by the distinguished author just quoted into four groups, and it is to the last of these, Group D, the new species belongs.

1. Simon—Hist. Nat. des Araign., i., 1892, pp. 214-215.

Genus *ULOBORUS*, Latr.*ULOBORUS CONGREGABILIS*, *sp. nov.*

(Figs. 1 and 2.)

Male. Cephalothorax, 1.4 mm. long, 1.1 mm. broad; abdomen, 1.8 mm. long, 1.1 mm. broad (fig. 1).

Cephalothorax.—Ovate, hairy. *Pars cephalica* obtuse, arched, yellowish down the middle, sides dark brown; *ocular area* broader than long; *clypeus*, deep. *Pars thoracica* broad, convex, yellow, but having two sub-lateral curved, longitudinal brown bars; *median fovea* deep; *marginal band* broad, dark brown. *Eyes.*—Arranged in two recurved rows of four each; the two median eyes of the front row are the largest of the entire series; they are seated closely together, are very prominent, and are poised upon the summit of a tubercular eminence; the median eyes of the posterior row are separated from each other by a space equal to about twice their individual diameter, while the lateral eyes of this row are each removed from its median neighbour by a space equal to once their individual diameter; anterior lateral eyes are as large as those of the posterior row. *Legs.*—The first pair are the longest and stoutest; the femur is dark brown with a yellowish annulation, patella dark brown, tibia dark brown with pale yellow annulation, metatarsus and tarsus yellow; all the other legs are, with the exception of their tarsi (which are yellow), dark brown with yellow annulations; each limb is clothed with golden pile, and armed with short, stiff spines; relative lengths: 1, 4, 2, 3. *Palpi.*—Short, dark brown, clothed with yellow pile; *genital bulb* large, complicated, and clothed with long golden hairs or bristles. *Falces.*—Robust, dark brown, hairy. *Maxillæ* and *Labium.*—Dark brown; normal. *Sternum.*—Elongate, arched, subparallel, dark brown, hairy, attenuated and acuminate posteriorly, and terminating between fourth pair of coxæ. *Abdomen.*—Somewhat cylindrical, highest towards the front, overhanging base of cephalothorax, dark brown with greyish patches; at its highest point there are two tubercles, and at the rear of these, two others. *Spinnerets* and *cribellum* normal.

Female. Cephalothorax, 1.9 mm. long, 1.3 mm. broad; abdomen, from *petiolus* to posterior angle 2.4 mm., from summit of anterior tubercle to spinnerets 4.5 mm., breadth 2.5 mm. (fig. 2).

Cephalothorax.—Ovate, hairy. *Pars cephalica* obtuse, arched, dark brown; *ocular area* and *clypeus* normal. *Pars thoracica* arched, dark brown; *median fovea* deep; *marginal band* broad, yellow. *Eyes.*—As in *Male*. *Legs.*—With the exception of tarsi (which are yellow), dark brown, with pale yellow annulations; first pair much the longest and strongest; each limb clothed with golden hairs, and armed with short stiff spines; *calamistrum*, normal; relative lengths: 1, 2, 4, 3. *Palpi.*—Short, dark brown, annulated with yellow, hairy. *Falces.*—Dark brown, hairy. *Maxillæ* and *Labium.*—Dark brown. *Sternum.*—As in *Male*. *Abdomen.*—Gibbous, overhanging base of cephalothorax, dark brown, mottled with grey, and having a rather large, whitish reticulated patch at anterior extremity, a large yellowish spot on each side near the middle (in some examples), and a broad concolorous bar running down the posterior angle towards the spinnerets. At the summit there is a large and prominent tubercular projection, and this is bifurcated at the apex; near the base of this projection there are two small tubercles connected by a distinct ridge. *Epigynum.*—This consists of two small tubercles widely separated from each other; at the summit of each tubercle there is a large elliptical pit; each of these is placed obliquely with its apex directed towards that of its neighbour. *Spinnerets* and *Cribellum.*—Normal.

Hab.—Parramatta, January 11, 1915.

I am indebted to Mr. McCulloch for an excellent series of this interesting species, examples of which he collected both in the field and in buildings. Considerable variation in colour and scheme of ornamentation is noticeable in both sexes. At first I was inclined to regard this species as *U. variabilis*, Keys. From the latter, however, it differs in size, form of abdomen, and the epigynum.² If the student

2. Keyserling—Die Arach. des. Aust. Suppl., 1887, p. 229, pl. xx., figs. 8, 8a, 8b.

will compare Keyserling's figures and description with those herein given he will easily detect the differences to which I refer. Individuals of *U. congregabilis* found in dwellings select dark recesses for their snares, while those that build in the open are usually found in cool, sheltered situations. Whether in buildings or in the open, the species is always found dwelling together in large or small communities, making a web in common, consisting of intricate reticularian lines and small orbs. The latter have each a white ribbon of hackled silk, known as the *stabilimentum*, running across the centre. Each female who has deposited her ova has her own ova-sac, at the mouth of which she mounts guard. This ova-sac or "cocoon," as it is sometimes termed, is of an irregular bag-like shape, closely woven, contains a large number of eggs, and is always suspended among the irregular or reticularian lines. The orbs are invariably placed horizontally or obliquely. Simon³ has described and figured a species of gregarious *Uloborus*, together with its webs and egg-bags, from Venezuela, whose communal habits are similar to its congener from Parramatta. To his species Simon gave the name of *U. republicanus*. It is interesting to note that those individuals inhabiting buildings are much darker than those living in the field.

Family THERIDIIDÆ.

The species hereunder described I associate with Simon's group, Euryopææ, and, for the time being at any rate, with that distinguished author's genus *Phylarchus*. Two specimens have been presented to me by Master Charles Danvers Power, and two other examples are in his collection. Hereafter it may be necessary to create for this species a new genus. Generally speaking, the legs of the Theridiidæ are long, slender and tapering; but in the species at present under study they are short and sturdy, and, as in the genus *Euryopsis*, Menge, the fourth pair are slightly the longest. The majority of species included in this family are sedentary, and construct a reticularian web for the capture of prey. *Euryopsis* and *Phylarchus*, on the other hand, do not do so, but belong to what Simon terms "Théridiides marcheurs." Consequently they are ground-rovers, and are usually found lurking under stones.

Genus PHYLARCHUS, Simon.

PHYLARCHUS SPLENDENS, sp. nov.

(Fig. 3).

Female. Cephalothorax, 1.7 mm. long, 1.4 mm. broad; abdomen, 4.4 mm. long, 2.6 mm. broad.

Cephalothorax.—Ovate, dark brown, nearly black. *Pars cephalica* strongly arched, somewhat obtuse, thoracic groove distinct; *ocular area* broader than long; *clypeus* deep, fringed with hairs. *Pars thoracica* broad, strongly arched, normal grooves and *median fovea* deep, but somewhat difficult to detect owing to the darkness of the carapace. *Marginal band* broad. *Eyes*.—Eight, arranged in two rows of four each; front row more strongly recurved than the rear; lateral pairs contiguous; posterior row bright and glittering, the median pair exceedingly so; anterior row black; front median pair separated from each other by a space equal to fully once their individual diameter, and from the rear median pair by a similar space; the rear median eyes are separated from each other by a space equal to about three-fourths their individual diameter; lateral eyes, both front and rear, are separated from their median neighbours respectively by a space equal to fully one-and-a-half their individual diameter. *Legs*.—Concolorous with cephalothorax, strong, rather short, tapering, hairy, and armed with short and moderately strong spines; relative lengths: 4, 1, 2, 3. *Palpi*.—Short, similar in colour and armature to legs. *Falces*.—Concolorous with palpi, short, acuminate, arched, hairy; fangs concolorous also. *Maxillæ*.—Concolorous also, short, convex, inclining inwards, moderately hairy. *Labium*.—Concolorous with forego, short, broader than long, apex curved. *Sternum*.—Concolorous with labium, broadly cordate, arched, moderately hairy, terminating obtusely between posterior coxæ. *Abdomen*.—Large, overhanging base of cephalothorax, ovate, strongly arched, hairy, dark brown (almost black); superior surface ornamented in front with a recurved, reticulated bright yellow bar, and a broad, concolorous median design which commences well forward and terminates near the spinnerets; within this median band there is a delicate scheme of tracery. *Epigynum*.—A small, strongly arched eminence or tubercle, with two large elliptical pits, one on each side.

3. Simon—An. de la Soc. Ent. Fr., lx., 1891, p. 12, pls. 3 and 4.

Ova-sac.—Sub-globose, about the size of a pea, loosely woven, transparent, eggs round and of a pinkish tint.

Hab.—Kitty's Creek, near Gladesville, Sydney. Taken from under stones.

Family ARGIOPIDÆ.

Subfamily ARGIOPINÆ.

Genus CAREPALXIS, L. Koch.

Another small, but striking, form is the one described below, and which I name in honour of my young friend, Master C. Danvers Power. The genus is a small one, containing as it does only about fourteen species. *Carepalxis* ranges through Australia, Papua, and Central America. In my "Census of Australian Araneidæ," six species are enumerated, and to these I now add one other.

CAREPALXIS POWERI, *sp. nov.*

(Fig. 4).

Female. Cephalothorax 2 mm. long, 1.6 mm. broad; abdomen, 3.6 mm. long, 3 mm. broad.

Cephalothorax.—Ovate, shining, bilobed, reddish-brown, moderately hairy. *Pars cephalica* strongly arched, obtuse, segmental groove profound; *ocular area* broader than long; *clypeus* strongly curved, deep. *Pars thoracica* strongly arched; *median fovea* profound; *marginal band* broad. *Eyes*.—Distributed over three series of 2, 4, 2 respectively; the median group arranged in pairs and forming a trapezium; each pair of eyes, both median and lateral, close together, the former nearly touching each other, and the latter conjoined; anterior median pair smaller than their posterior neighbours; lateral eyes smallest. *Legs*.—Short, strong, tapering, hairy, armed with short spines, yellow, annulated with reddish-brown; relative lengths: 1, 4, 2, 3. *Palpi*.—Moderately long, similar in colour, clothing and armature to legs. *Falces*.—Yellow, shining, strongly arched, tapering, inner angles fringed with fine hairs. *Maxillæ*.—Dull yellow, short, broad, arched, apices inclined inwards. *Labium*.—Concolorous, short, broad, arched, apex curved. *Sternum*.—Broad, somewhat shield-shaped, posterior extremity acuminate, and terminating between fourth pair of coxæ; surface uneven, hairy; two rather large, though not high, tubercles in front, and two smaller ones on each side, and seated opposite the second and third coxæ respectively; the general colour is dark brown, but the tubercles are pale yellow. *Abdomen*.—Somewhat ovate in outline, overhanging base of cephalothorax, and having towards the summit, but seated laterally, two large mammiliform tubercles; posterior angle deep, retreating; the general colour is yellow, mottled with dark brown. *Epigynum*.—Long, slender, straight.

Hab.—Narrabeen, near Sydney.